

Virginia Department of Health DIVISION OF ENVIRONMENTAL EPIDEMIOLOGY



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Frequently Asked Questions on Bisphenol A and Your Health

What is bisphenol A?

Bisphenol A (BPA) is a chemical produced in large quantities for use primarily in the production of polycarbonate plastics and epoxy resins.

Where is BPA found?

Polycarbonate plastics have many applications including use in some food and drink packaging, e.g., water and infant bottles, compact discs, impact-resistant safety equipment, and medical devices. Epoxy resins are used as lacquers to coat metal products such as food cans, bottle tops, and water supply pipes. Some dental sealants and composites may also contribute to BPA exposure.

How does BPA get into the body?

The primary source of exposure to BPA for most people is through the diet. BPA in food and beverages accounts for the majority of daily human exposure; air, dust, and water are other possible sources of exposure.

Bisphenol A can leach into food from the protective internal epoxy resin coatings of canned foods and from consumer products such as polycarbonate tableware, food storage containers, water bottles, and baby bottles. The degree to which BPA leaches from polycarbonate bottles into liquid may depend more on the temperature of the liquid or bottle, than the age of the container. BPA can also be found in breast milk.

Why are people concerned about BPA?

One reason people may be concerned about BPA is because human exposure to BPA is widespread. The 2003-2004 National Health and Nutrition Examination Survey (NHANES III) conducted by the Centers for Disease Control and Prevention (CDC) found detectable levels of BPA in 93% of 2517 urine samples from people six years and older. The CDC NHANES data are considered representative of exposures in the United States. Another reason for concern, especially for parents, may be because some animal studies report effects in fetuses and newborns exposed to BPA.

Does exposure to bisphenol A (BPA) cause health problems?

According to a final report released on September 3, 2008, by the National Toxicology Program (NTP) of the National Institutes of Health (NIH) (http://ntp.niehs.nih.gov/) current human exposure to bisphenol A (BPA), a chemical used in many polycarbonate plastics and epoxy resins, is of "some concern" for effects on development of the prostate gland and brain and for behavioral effects in fetuses, infants and children.

New research, published in the September 16 issue of the Journal of the American Medical Association, found a correlation between BPA in the urine of a sample of Americans and the existence of certain chronic diseases in those persons. Although this study is not definitive, it will undoubtedly result in additional review of bisphenol A by the U.S. Food and Drug Administration (FDA). An earlier review by FDA stated that BPA was "safe and that exposure levels to BPA from food contact materials, including for infants and children, are below those that may cause health effects."

Is VDH going to ban bisphenol A (BPA)?

No. Authority to ban BPA in consumer products rests with the FDA. FDA will be reviewing this and any other new research on BPA. The historical approach has been to assume these chemicals are safe. This new research may cause FDA to take a precautionary approach, which means looking at these compounds more suspiciously

If I am concerned, what can I do to prevent exposure to BPA?

Some animal studies suggest that infants and children may be the most vulnerable to the effects of BPA. Parents and caregivers, can make the personal choice to reduce exposures of their infants and children to BPA:

- Don't microwave polycarbonate plastic food containers. Polycarbonate is strong and durable, but over time it may break down from overuse at high temperatures.
- Avoid using polycarbonate plastic food containers with the number "7" on the bottom.
- Don't wash polycarbonate plastic containers in the dishwasher with harsh detergents.
- Reduce your use of canned foods. Eat fresh or frozen foods.
- When possible, use glass, porcelain or stainless steel containers, particularly for hot food or liquids.
- Use baby bottles and toys that are labeled BPA-free.

